

# Magali Cucchiarini

## List of Publications by Year in descending order

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Version: 2024-02-01

172  
papers

5,960  
citations

66343

42  
h-index

110387

64  
g-index

175  
all docs

175  
docs citations

175  
times ranked

5248  
citing authors

| #  | ARTICLE                                                                                                                                                                                                                                        | IF   | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1  | Triblock Copolymer Bioinks in Hydrogel Three-Dimensional Printing for Regenerative Medicine: A Focus on Pluronic F127. <i>Tissue Engineering - Part B: Reviews</i> , 2022, 28, 451-463.                                                        | 4.8  | 24        |
| 2  | Pluronic F127/Doxorubicin microemulsions: Preparation, characterization, and toxicity evaluations. <i>Journal of Molecular Liquids</i> , 2022, 345, 117028.                                                                                    | 4.9  | 37        |
| 3  | Potential Gene Therapy Options for Early OA. , 2022, , 321-337.                                                                                                                                                                                |      | 0         |
| 4  | Axial alignment is a critical regulator of knee osteoarthritis. <i>Science Translational Medicine</i> , 2022, 14, eabn0179.                                                                                                                    | 12.4 | 7         |
| 5  | Mitochondrial Genome Editing to Treat Human Osteoarthritis—A Narrative Review. <i>International Journal of Molecular Sciences</i> , 2022, 23, 1467.                                                                                            | 4.1  | 8         |
| 6  | Application of Alginate Hydrogels for Next-Generation Articular Cartilage Regeneration. <i>International Journal of Molecular Sciences</i> , 2022, 23, 1147.                                                                                   | 4.1  | 39        |
| 7  | The effect of pNaSS grafting of knitted poly( $\epsilon$ -caprolactone) artificial ligaments on in vitro mineralization and in vivo osseointegration. <i>Materialia</i> , 2022, 21, 101331.                                                    | 2.7  | 3         |
| 8  | A high-resolution cross-species comparative analysis of the subchondral bone provides insight into critical topographical patterns of the osteochondral unit. <i>Clinical and Translational Medicine</i> , 2022, 12, e745.                     | 4.0  | 2         |
| 9  | Quantifying the Human Subchondral Trabecular Bone Microstructure in Osteoarthritis with Clinical CT. <i>Advanced Science</i> , 2022, 9, .                                                                                                      | 11.2 | 10        |
| 10 | Joint Cartilage in Long-Duration Spaceflight. <i>Biomedicines</i> , 2022, 10, 1356.                                                                                                                                                            | 3.2  | 3         |
| 11 | Subchondral Drilling Independent of Drill Hole Number Improves Articular Cartilage Repair and Reduces Subchondral Bone Alterations Compared With Debridement in Adult Sheep. <i>American Journal of Sports Medicine</i> , 2022, 50, 2669-2679. | 4.2  | 3         |
| 12 | Single-cell RNA-seq reveals novel mitochondria-related musculoskeletal cell populations during adult axolotl limb regeneration process. <i>Cell Death and Differentiation</i> , 2021, 28, 1110-1125.                                           | 11.2 | 26        |
| 13 | Comparative anatomy and morphology of the knee in translational models for articular cartilage disorders. Part II: Small animals. <i>Annals of Anatomy</i> , 2021, 234, 151630.                                                                | 1.9  | 16        |
| 14 | Nanomaterials for the Diagnosis and Treatment of Urinary Tract Infections. <i>Nanomaterials</i> , 2021, 11, 546.                                                                                                                               | 4.1  | 32        |
| 15 | rAAV-Mediated Human FGF-2 Gene Therapy Enhances Osteochondral Repair in a Clinically Relevant Large Animal Model Over Time In Vivo. <i>American Journal of Sports Medicine</i> , 2021, 49, 958-969.                                            | 4.2  | 15        |
| 16 | Vitamin D Receptor and Vitamin D Binding Protein Gene Polymorphisms Are Associated with Renal Allograft Outcome. <i>Nutrients</i> , 2021, 13, 1101.                                                                                            | 4.1  | 1         |
| 17 | Nanodiagnosis and Nanotreatment of Cardiovascular Diseases: An Overview. <i>Chemosensors</i> , 2021, 9, 67.                                                                                                                                    | 3.6  | 24        |
| 18 | Multi-Functionalized Nanomaterials and Nanoparticles for Diagnosis and Treatment of Retinoblastoma. <i>Biosensors</i> , 2021, 11, 97.                                                                                                          | 4.7  | 49        |

| #  | ARTICLE                                                                                                                                                                                                                                                            | IF   | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Nanomaterials for the Diagnosis and Treatment of Inflammatory Arthritis. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3092.                                                                                                                      | 4.1  | 30        |
| 20 | Hydrogel-Guided, rAAV-Mediated IGF-1 Overexpression Enables Long-Term Cartilage Repair and Protection against Perifocal Osteoarthritis in a Large Animal Full-Thickness Chondral Defect Model at One Year In Vivo. <i>Advanced Materials</i> , 2021, 33, e2008451. | 21.0 | 47        |
| 21 | Biomaterial-assisted gene therapy for translational approaches to treat musculoskeletal disorders. <i>Materials Today Advances</i> , 2021, 9, 100126.                                                                                                              | 5.2  | 4         |
| 22 | Is Extracellular Vesicle-Based Therapy the Next Answer for Cartilage Regeneration?. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 645039.                                                                                                        | 4.1  | 16        |
| 23 | Nanotechnology in Bladder Cancer: Diagnosis and Treatment. <i>Cancers</i> , 2021, 13, 2214.                                                                                                                                                                        | 3.7  | 56        |
| 24 | Application of Nanotechnology for Sensitive Detection of Low-Abundance Single-Nucleotide Variations in Genomic DNA: A Review. <i>Nanomaterials</i> , 2021, 11, 1384.                                                                                               | 4.1  | 27        |
| 25 | Tissue Regeneration through Cyber-Physical Systems and Microbots. <i>Advanced Functional Materials</i> , 2021, 31, 2009663.                                                                                                                                        | 14.9 | 9         |
| 26 | The Potential Application of Magnetic Nanoparticles for Liver Fibrosis Theranostics. <i>Frontiers in Chemistry</i> , 2021, 9, 674786.                                                                                                                              | 3.6  | 22        |
| 27 | Phytochemical and nutra-pharmaceutical attributes of <i>Mentha</i> spp.: A comprehensive review. <i>Arabian Journal of Chemistry</i> , 2021, 14, 103106.                                                                                                           | 4.9  | 64        |
| 28 | DNA Based and Stimuli-Responsive Smart Nanocarrier for Diagnosis and Treatment of Cancer: Applications and Challenges. <i>Cancers</i> , 2021, 13, 3396.                                                                                                            | 3.7  | 46        |
| 29 | Natural and Synthetic Bioinks for 3D Bioprinting. <i>Advanced NanoBiomed Research</i> , 2021, 1, 2000097.                                                                                                                                                          | 3.6  | 60        |
| 30 | A review of dental composites: Challenges, chemistry aspects, filler influences, and future insights. <i>Composites Part B: Engineering</i> , 2021, 216, 108852.                                                                                                   | 12.0 | 97        |
| 31 | SOX2 and Bcl-2 as a Novel Prognostic Value in Hepatocellular Carcinoma Progression. <i>Current Oncology</i> , 2021, 28, 3015-3029.                                                                                                                                 | 2.2  | 5         |
| 32 | pNaSS-Grafted PCL Film-Guided rAAV TGF- $\beta$ 2 Gene Therapy Activates the Chondrogenic Activities in Human Bone Marrow Aspirates. <i>Human Gene Therapy</i> , 2021, 32, 895-906.                                                                                | 2.7  | 4         |
| 33 | Ectopic models recapitulating morphological and functional features of articular cartilage. <i>Annals of Anatomy</i> , 2021, 237, 151721.                                                                                                                          | 1.9  | 3         |
| 34 | Synthesis, characterization, toxicity and morphology assessments of newly prepared microemulsion systems for delivery of valproic acid. <i>Journal of Molecular Liquids</i> , 2021, 338, 116625.                                                                   | 4.9  | 40        |
| 35 | Design of Mannose-Coated Rifampicin nanoparticles modulating the immune response and Rifampicin induced hepatotoxicity with improved oral drug delivery. <i>Arabian Journal of Chemistry</i> , 2021, 14, 103321.                                                   | 4.9  | 23        |
| 36 | A Comprehensive Review of Detection Methods for SARS-CoV-2. <i>Microorganisms</i> , 2021, 9, 232.                                                                                                                                                                  | 3.6  | 74        |

| #  | ARTICLE                                                                                                                                                                                                                                                             | IF   | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | rAAV-Mediated <i>sox9</i> Overexpression Improves the Repair of Osteochondral Defects in a Clinically Relevant Large Animal Model Over Time In Vivo and Reduces Perifocal Osteoarthritic Changes. <i>American Journal of Sports Medicine</i> , 2021, 49, 3696-3707. | 4.2  | 13        |
| 38 | Stem cell-derived biofactors fight against coronavirus infection. <i>World Journal of Stem Cells</i> , 2021, 13, 1813-1825.                                                                                                                                         | 2.8  | 4         |
| 39 | The diagnostic value of immunohistochemical staining of the interstitial vascular C4d complement in membranous nephropathy. <i>Current Issues in Pharmacy and Medical Sciences</i> , 2021, 34, 181-186.                                                             | 0.4  | 0         |
| 40 | Biomaterial-Guided Recombinant Adeno-associated Virus Delivery from Poly(Sodium Styrene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Engineering - Part A, 2020, 26, 450-459.                                                                                          | 3.1  | 12        |
| 41 | Thermosensitive Hydrogel Based on PEO-PPO-PEO Poloxamers for a Controlled In Situ Release of Recombinant Adeno-Associated Viral Vectors for Effective Gene Therapy of Cartilage Defects. <i>Advanced Materials</i> , 2020, 32, e1906508.                            | 21.0 | 108       |
| 42 | Scaffold-Mediated Gene Delivery for Osteochondral Repair. <i>Pharmaceutics</i> , 2020, 12, 930.                                                                                                                                                                     | 4.5  | 16        |
| 43 | Analysis of spatial osteochondral heterogeneity in advanced knee osteoarthritis exposes influence of joint alignment. <i>Science Translational Medicine</i> , 2020, 12, .                                                                                           | 12.4 | 21        |
| 44 | Cyclodextrin Cationic Polymer-Based Nanoassemblies to Manage Inflammation by Intra-Articular Delivery Strategies. <i>Nanomaterials</i> , 2020, 10, 1712.                                                                                                            | 4.1  | 6         |
| 45 | Curcumin Nanocrystals: Production, Physicochemical Assessment, and In Vitro Evaluation of the Antimicrobial Effects against Bacterial Loading of the Implant Fixture. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8356.                                       | 2.5  | 16        |
| 46 | Investigation of microstructural alterations of the human subchondral bone following microfracture penetration reveals effect of three-dimensional device morphology. <i>Clinical and Translational Medicine</i> , 2020, 10, e230.                                  | 4.0  | 5         |
| 47 | Cyst formation in the subchondral bone following cartilage repair. <i>Clinical and Translational Medicine</i> , 2020, 10, e248.                                                                                                                                     | 4.0  | 11        |
| 48 | rAAV-Mediated Overexpression of SOX9 and TGF- $\beta$ 2 via Carbon Dot-Guided Vector Delivery Enhances the Biological Activities in Human Bone Marrow-Derived Mesenchymal Stromal Cells. <i>Nanomaterials</i> , 2020, 10, 855.                                      | 4.1  | 15        |
| 49 | Enhanced Chondrogenic Differentiation Activities in Human Bone Marrow Aspirates via <i>sox9</i> Overexpression Mediated by pNaSS-Grafted PCL Film-Guided rAAV Gene Transfer. <i>Pharmaceutics</i> , 2020, 12, 280.                                                  | 4.5  | 15        |
| 50 | Small-Diameter Subchondral Drilling Improves DNA and Proteoglycan Content of the Cartilaginous Repair Tissue in a Large Animal Model of a Full-Thickness Chondral Defect. <i>Journal of Clinical Medicine</i> , 2020, 9, 1903.                                      | 2.4  | 12        |
| 51 | Therapeutic Delivery of rAAV <i>sox9</i> via Polymeric Micelles Counteracts the Effects of Osteoarthritis-Associated Inflammatory Cytokines in Human Articular Chondrocytes. <i>Nanomaterials</i> , 2020, 10, 1238.                                                 | 4.1  | 10        |
| 52 | The Use of Nanomaterials in Tissue Engineering for Cartilage Regeneration; Current Approaches and Future Perspectives. <i>International Journal of Molecular Sciences</i> , 2020, 21, 536.                                                                          | 4.1  | 86        |
| 53 | Exploring the Role of Stem Cells in Cancer Development and Progression. <i>Annals of Cancer Research and Therapy</i> , 2020, 28, 3-8.                                                                                                                               | 0.3  | 3         |
| 54 | Controlled Release of rAAV Vectors from APMA-Functionalized Contact Lenses for Corneal Gene Therapy. <i>Pharmaceutics</i> , 2020, 12, 335.                                                                                                                          | 4.5  | 15        |

| #  | ARTICLE                                                                                                                                                                                                                                                  | IF   | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Dysregulated levels of glycogen synthase kinase-3 $\hat{1}$ 2 (GSK-3 $\hat{1}$ 2) and miR-135 in peripheral blood samples of cases with nephrotic syndrome. PeerJ, 2020, 8, e10377.                                                                      | 2.0  | 3         |
| 56 | Analysis of early cellular responses of anterior cruciate ligament fibroblasts seeded on different molecular weight polycaprolactone films functionalized by a bioactive poly(sodium styrene) Tj ETQq0 0 0 rgBT /Overlock 10 16 50 697 T                 |      |           |
| 57 | Effects of rAAV-Mediated sox9 Overexpression on the Biological Activities of Human Osteoarthritic Articular Chondrocytes in Their Intrinsic Three-Dimensional Environment. Journal of Clinical Medicine, 2019, 8, 1637.                                  | 2.4  | 8         |
| 58 | Secretome and Extracellular Vesicles as New Biological Therapies for Knee Osteoarthritis: A Systematic Review. Journal of Clinical Medicine, 2019, 8, 1867.                                                                                              | 2.4  | 62        |
| 59 | Association of Nicotine with Osteochondrogenesis and Osteoarthritis Development: The State of the Art of Preclinical Research. Journal of Clinical Medicine, 2019, 8, 1699.                                                                              | 2.4  | 5         |
| 60 | Remodeling of Human Osteochondral Defects via rAAV-Mediated Co-Overexpression of TGF- $\hat{1}$ 2 and IGF-I from Implanted Human Bone Marrow-Derived Mesenchymal Stromal Cells. Journal of Clinical Medicine, 2019, 8, 1326.                             | 2.4  | 4         |
| 61 | Topographic modeling of early human osteoarthritis in sheep. Science Translational Medicine, 2019, 11, .                                                                                                                                                 | 12.4 | 31        |
| 62 | Current Trends in Viral Gene Therapy for Human Orthopaedic Regenerative Medicine. Tissue Engineering and Regenerative Medicine, 2019, 16, 345-355.                                                                                                       | 3.7  | 19        |
| 63 | Therapeutic Effects of rAAV-Mediated Concomittant Gene Transfer and Overexpression of TGF- $\hat{1}$ 2 and IGF-I on the Chondrogenesis of Human Bone-Marrow-Derived Mesenchymal Stem Cells. International Journal of Molecular Sciences, 2019, 20, 2591. | 4.1  | 8         |
| 64 | Supramolecular Cyclodextrin-Based Hydrogels for Controlled Gene Delivery. Polymers, 2019, 11, 514.                                                                                                                                                       | 4.5  | 37        |
| 65 | An overview of thermal necrosis: present and future. Current Medical Research and Opinion, 2019, 35, 1555-1562.                                                                                                                                          | 1.9  | 41        |
| 66 | Future Aspects of Clinical Osteoarthritis Therapies in the Continuum of Translational Research. Zeitschrift Fur Orthopadie Und Unfallchirurgie, 2019, 157, 629-643.                                                                                      | 0.7  | 2         |
| 67 | Asymptomatic focal calcium pyrophosphate crystal deposition within partially failed repair tissue after matrix-assisted autologous chondrocyte implantation. Knee Surgery, Sports Traumatology, Arthroscopy, 2019, 27, 1939-1942.                        | 4.2  | 1         |
| 68 | Biomaterial-guided delivery of gene vectors for targeted articular cartilage repair. Nature Reviews Rheumatology, 2019, 15, 18-29.                                                                                                                       | 8.0  | 92        |
| 69 | Cells, soluble factors and matrix harmonically play the concert of allograft integration. Knee Surgery, Sports Traumatology, Arthroscopy, 2019, 27, 1717-1725.                                                                                           | 4.2  | 18        |
| 70 | Autologous Matrix-Induced Chondrogenesis: A Systematic Review of the Clinical Evidence. American Journal of Sports Medicine, 2019, 47, 222-231.                                                                                                          | 4.2  | 77        |
| 71 | Translational applications of photopolymerizable hydrogels for cartilage repair. Journal of Experimental Orthopaedics, 2019, 6, 47.                                                                                                                      | 1.8  | 25        |
| 72 | Biomaterials and Gene Therapy: A Smart Combination for MSC Musculoskeletal Engineering. Current Stem Cell Research and Therapy, 2019, 14, 337-343.                                                                                                       | 1.3  | 11        |

| #  | ARTICLE                                                                                                                                                                                                                                                                                    | IF  | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Chondrogenic Differentiation Processes in Human Bone-Marrow Aspirates Seeded in Three-Dimensional-Woven Poly( $\epsilon$ -Caprolactone) Scaffolds Enhanced by Recombinant Adeno-Associated Virus $\epsilon$ -Mediated SOX9 Gene Transfer. <i>Human Gene Therapy</i> , 2018, 29, 1277-1286. | 2.7 | 12        |
| 74 | Advances in gene therapy for cartilage repair. <i>Annals of Joint</i> , 2018, 3, 97-97.                                                                                                                                                                                                    | 1.0 | 7         |
| 75 | Injectable Systems for Intra-Articular Delivery of Mesenchymal Stromal Cells for Cartilage Treatment: A Systematic Review of Preclinical and Clinical Evidence. <i>International Journal of Molecular Sciences</i> , 2018, 19, 3322.                                                       | 4.1 | 25        |
| 76 | Improved Chondrogenic Differentiation of rAAV SOX9-Modified Human MSCs Seeded in Fibrin-Polyurethane Scaffolds in a Hydrodynamic Environment. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2635.                                                                         | 4.1 | 18        |
| 77 | Orthopaedic regenerative tissue engineering en route to the holy grail: disequilibrium between the demand and the supply in the operating room. <i>Journal of Experimental Orthopaedics</i> , 2018, 5, 14.                                                                                 | 1.8 | 28        |
| 78 | Effective Remodelling of Human Osteoarthritic Cartilage by <i>sox9</i> Gene Transfer and Overexpression upon Delivery of rAAV Vectors in Polymeric Micelles. <i>Molecular Pharmaceutics</i> , 2018, 15, 2816-2826.                                                                         | 4.6 | 29        |
| 79 | Effects of TGF $\beta$ 2 Overexpression via rAAV Gene Transfer on the Early Repair Processes in an Osteochondral Defect Model in Minipigs. <i>American Journal of Sports Medicine</i> , 2018, 46, 1987-1996.                                                                               | 4.2 | 30        |
| 80 | Sustained spatiotemporal release of TGF $\beta$ 21 confers enhanced very early chondrogenic differentiation during osteochondral repair in specific topographic patterns. <i>FASEB Journal</i> , 2018, 32, 5298-5311.                                                                      | 0.5 | 16        |
| 81 | PEO-PPO-PEO Tri-Block Copolymers for Gene Delivery Applications in Human Regenerative Medicine $\epsilon$ An Overview. <i>International Journal of Molecular Sciences</i> , 2018, 19, 775.                                                                                                 | 4.1 | 59        |
| 82 | Subchondral drilling for articular cartilage repair: a systematic review of translational research. <i>DMM Disease Models and Mechanisms</i> , 2018, 11, .                                                                                                                                 | 2.4 | 37        |
| 83 | Controlled release of gene therapy constructs from solid scaffolds for therapeutic applications in orthopedics. <i>Discovery Medicine</i> , 2018, 25, 195-203.                                                                                                                             | 0.5 | 5         |
| 84 | Controlled Gene Delivery Systems for Articular Cartilage Repair. <i>Advanced Structured Materials</i> , 2017, , 261-300.                                                                                                                                                                   | 0.5 | 1         |
| 85 | Effects of combined rAAV-mediated TGF $\beta$ 2 and <i>sox9</i> gene transfer and overexpression on the metabolic and chondrogenic activities in human bone marrow aspirates. <i>Journal of Experimental Orthopaedics</i> , 2017, 4, 4.                                                    | 1.8 | 5         |
| 86 | Peripheral blood aspirates overexpressing IGF $\beta$ 1 <i>via</i> rAAV gene transfer undergo enhanced chondrogenic differentiation processes. <i>Journal of Cellular and Molecular Medicine</i> , 2017, 21, 2748-2758.                                                                    | 3.6 | 9         |
| 87 | Supramolecular polypseudorotaxane gels for controlled delivery of rAAV vectors in human mesenchymal stem cells for regenerative medicine. <i>International Journal of Pharmaceutics</i> , 2017, 531, 492-503.                                                                              | 5.2 | 33        |
| 88 | New cell engineering approaches for cartilage regenerative medicine. <i>Bio-Medical Materials and Engineering</i> , 2017, 28, S201-S207.                                                                                                                                                   | 0.6 | 1         |
| 89 | Early loss of subchondral bone following microfracture is counteracted by bone marrow aspirate in a translational model of osteochondral repair. <i>Scientific Reports</i> , 2017, 7, 45189.                                                                                               | 3.3 | 20        |
| 90 | Hydrogels for precision meniscus tissue engineering: a comprehensive review. <i>Connective Tissue Research</i> , 2017, 58, 317-328.                                                                                                                                                        | 2.3 | 25        |

| #   | ARTICLE                                                                                                                                                                                                                                                                                           | IF  | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91  | Effects of solid acellular type-I/III collagen biomaterials on in vitro and in vivo chondrogenesis of mesenchymal stem cells. Expert Review of Medical Devices, 2017, 14, 717-732.                                                                                                                | 2.8 | 15        |
| 92  | Impact of mechanical stimulation on the chondrogenic processes in human bone marrow aspirates modified to overexpress sox9 via rAAV vectors. Journal of Experimental Orthopaedics, 2017, 4, 22.                                                                                                   | 1.8 | 9         |
| 93  | Genetic Modification of Human Peripheral Blood Aspirates Using Recombinant Adeno-Associated Viral Vectors for Articular Cartilage Repair with a Focus on Chondrogenic Transforming Growth Factor- $\beta^2$ Gene Delivery. Stem Cells Translational Medicine, 2017, 6, 249-260.                   | 3.3 | 11        |
| 94  | rAAV-mediated overexpression of TGF- $\beta$ via vector delivery in polymeric micelles stimulates the biological and reparative activities of human articular chondrocytes in vitro and in a human osteochondral defect model. International Journal of Nanomedicine, 2017, Volume 12, 6985-6996. | 6.7 | 33        |
| 95  | Bone Marrow Aspirate Concentrate-Enhanced Marrow Stimulation of Chondral Defects. Stem Cells International, 2017, 2017, 1-13.                                                                                                                                                                     | 2.5 | 56        |
| 96  | Smart and Controllable rAAV Gene Delivery Carriers in Progenitor Cells for Human Musculoskeletal Regenerative Medicine with a Focus on the Articular Cartilage. Current Gene Therapy, 2017, 17, 127-138.                                                                                          | 2.0 | 7         |
| 97  | Gene Transfer Strategies for Articular Cartilage Repair. , 2017, , 151-167.                                                                                                                                                                                                                       |     | 0         |
| 98  | Hydrogel-Based Controlled Delivery Systems for Articular Cartilage Repair. BioMed Research International, 2016, 2016, 1-12.                                                                                                                                                                       | 1.9 | 39        |
| 99  | rAAV-mediated combined gene transfer and overexpression of TGF $\beta^2$ and SOX9 remodels human osteoarthritic articular cartilage. Journal of Orthopaedic Research, 2016, 34, 2181-2190.                                                                                                        | 2.3 | 23        |
| 100 | Gene- and Stem Cell-Based Approaches to Regulate Hypertrophic Differentiation in Articular Cartilage Disorders. Stem Cells and Development, 2016, 25, 1495-1512.                                                                                                                                  | 2.1 | 7         |
| 101 | Biomedical-grade, high mannuronic acid content (BioMVM) alginate enhances the proteoglycan production of primary human meniscal fibrochondrocytes in a 3-D microenvironment. Scientific Reports, 2016, 6, 28170.                                                                                  | 3.3 | 14        |
| 102 | Recent tissue engineering-based advances for effective rAAV-mediated gene transfer in the musculoskeletal system. Bioengineered, 2016, 7, 175-188.                                                                                                                                                | 3.2 | 11        |
| 103 | Gene Therapy, Growth Factors, Mesenchymal Cells, New Trends and Future Perspectives. , 2016, , 559-575.                                                                                                                                                                                           |     | 1         |
| 104 | TGF $\beta^2$ gene transfer and overexpression via rAAV vectors stimulates chondrogenic events in human bone marrow aspirates. Journal of Cellular and Molecular Medicine, 2016, 20, 430-440.                                                                                                     | 3.6 | 16        |
| 105 | Effects of rAAV-mediated FGF-2 gene transfer and overexpression upon the chondrogenic differentiation processes in human bone marrow aspirates. Journal of Experimental Orthopaedics, 2016, 3, 16.                                                                                                | 1.8 | 8         |
| 106 | Basic science of osteoarthritis. Journal of Experimental Orthopaedics, 2016, 3, 22.                                                                                                                                                                                                               | 1.8 | 69        |
| 107 | PEO-PPO-PEO Carriers for rAAV-Mediated Transduction of Human Articular Chondrocytes in Vitro and in a Human Osteochondral Defect Model. ACS Applied Materials & Interfaces, 2016, 8, 20600-20613.                                                                                                 | 8.0 | 38        |
| 108 | A novel algorithm for a precise analysis of subchondral bone alterations. Scientific Reports, 2016, 6, 32982.                                                                                                                                                                                     | 3.3 | 11        |

| #   | ARTICLE                                                                                                                                                                                                                                                                                                | IF  | CITATIONS |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | Role of the Subchondral Bone in Articular Cartilage Degeneration and Repair. <i>Journal of the American Academy of Orthopaedic Surgeons</i> , The, 2016, 24, e45-e46.                                                                                                                                  | 2.5 | 24        |
| 110 | Co-overexpression of TGF- $\beta$ 2 and SOX9 via rAAV gene transfer modulates the metabolic and chondrogenic activities of human bone marrow-derived mesenchymal stem cells. <i>Stem Cell Research and Therapy</i> , 2016, 7, 20.                                                                      | 5.5 | 24        |
| 111 | Small-Diameter Awls Improve Articular Cartilage Repair After Microfracture Treatment in a Translational Animal Model. <i>American Journal of Sports Medicine</i> , 2016, 44, 209-219.                                                                                                                  | 4.2 | 67        |
| 112 | Controlled release strategies for rAAV-mediated gene delivery. <i>Acta Biomaterialia</i> , 2016, 29, 1-10.                                                                                                                                                                                             | 8.3 | 40        |
| 113 | Gene therapy for human osteoarthritis: principles and clinical translation. <i>Expert Opinion on Biological Therapy</i> , 2016, 16, 331-346.                                                                                                                                                           | 3.1 | 44        |
| 114 | Human gene therapy: novel approaches to improve the current gene delivery systems. <i>Discovery Medicine</i> , 2016, 21, 495-506.                                                                                                                                                                      | 0.5 | 27        |
| 115 | Effective and durable genetic modification of human mesenchymal stem cells via controlled release of rAAV vectors from self-assembling peptide hydrogels with a maintained differentiation potency. <i>Acta Biomaterialia</i> , 2015, 18, 118-127.                                                     | 8.3 | 47        |
| 116 | Large animal models in experimental knee sports surgery: focus on clinical translation. <i>Journal of Experimental Orthopaedics</i> , 2015, 2, 9.                                                                                                                                                      | 1.8 | 31        |
| 117 | New trends in articular cartilage repair. <i>Journal of Experimental Orthopaedics</i> , 2015, 2, 8.                                                                                                                                                                                                    | 1.8 | 12        |
| 118 | Overexpression of TGF- $\beta$ 2 via rAAV-Mediated Gene Transfer Promotes the Healing of Human Meniscal Lesions Ex Vivo on Explanted Menisci. <i>American Journal of Sports Medicine</i> , 2015, 43, 1197-1205.                                                                                        | 4.2 | 24        |
| 119 | Comprehensive analysis of translational osteochondral repair: Focus on the histological assessment. <i>Progress in Histochemistry and Cytochemistry</i> , 2015, 50, 19-36.                                                                                                                             | 5.1 | 24        |
| 120 | PEO-PPG-PEO micelles as effective rAAV-mediated gene delivery systems to target human mesenchymal stem cells without altering their differentiation potency. <i>Acta Biomaterialia</i> , 2015, 27, 42-52.                                                                                              | 8.3 | 50        |
| 121 | Chondrogenic Differentiation Processes in Human Bone Marrow Aspirates upon rAAV-Mediated Gene Transfer and Overexpression of the Insulin-Like Growth Factor I. <i>Tissue Engineering - Part A</i> , 2015, 21, 2460-2471.                                                                               | 3.1 | 20        |
| 122 | Adapted chondrogenic differentiation of human mesenchymal stem cells via controlled release of TGF- $\beta$ 1 from poly(ethylene oxide)-terephthalate/poly(butylene terephthalate) multiblock scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 371-383.                | 4.0 | 23        |
| 123 | Effect of open wedge high tibial osteotomy on the lateral tibiofemoral compartment in sheep. Part III: analysis of the microstructure of the subchondral bone and correlations with the articular cartilage and meniscus. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2015, 23, 2704-2714. | 4.2 | 35        |
| 124 | Current Progress in Stem Cell-Based Gene Therapy for Articular Cartilage Repair. <i>Current Stem Cell Research and Therapy</i> , 2015, 10, 121-131.                                                                                                                                                    | 1.3 | 43        |
| 125 | Current perspectives in stem cell research for knee cartilage repair. <i>Stem Cells and Cloning: Advances and Applications</i> , 2014, 7, 1.                                                                                                                                                           | 2.3 | 64        |
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